

C.F.R. 1.121, an Examiner's Courtesy Copy of the claims pending upon entry of this amendment and an Amendment Transmittal. The time set for this response is October 16, 2002.

It is believed that no fees are required for these submissions. However, should the United States Patent and Trademark Office determine that any fee is due or that any refund is owed for this application, the Commissioner is hereby authorized and requested to charge the required fee(s) and/or credit the refund(s) owed to our Deposit Account No. 04-0100.

IN THE CLAIMS:

✓
Please cancel unelected claims 1, 2 and 22-27, without prejudice or disclaimer. Please amend the claims pursuant to 37 C.F.R. 1.121 as follows (see the accompanying "marked up" version pursuant to 1.121):

B¹
28. (Amended) A method of screening for a compound that increases activity of an Sp1 or B segment-binding β_3 -adrenergic receptor (β_3 -AR) *trans*-activating factor in human cells, which method comprises:

- SUB C1)
- (a) contacting cells capable of producing the Sp1 or B segment-binding β_3 -AR *trans*-activating factor with a test compound; and
 - (b) detecting an increase in a level of activity of the Sp1 or B segment-binding β_3 -AR *trans*-activating factor.

29. (Amended) A method of screening for a compound that increases activity of a β_3 -adrenergic receptor (β_3 -AR) *trans*-activating factor in human cells, which method comprises:

(a) contacting cells capable of producing the β_3 -AR *trans*-activating factor with a test compound; and

(b) detecting an increase in a level of activity of the β_3 -AR *trans*-activating factor, wherein the increase in the level of activity of the β_3 -AR *trans*-activating factor is detected by detecting an increase in the level of expression of a reporter gene operatively associated with an isolated nucleic acid having a nucleotide sequence GCCTCTGGGGAG (SEQ ID NO:1) relative to a level of expression prior to contact with the test compound.

30. (Amended) A method according to claim 28, wherein the increase in the level of activity of the β_3 -AR *trans*-activating factor is detected by detecting an increase in the amount of β_3 -AR *trans*-activating factor present in the cells after contacting them with the test compound relative to the amount present prior to contact with the test compound.

33. (Amended) A method of screening for a compound that inhibits activity of an Sp1 or B segment-binding β_3 -adrenergic receptor (β_3 -AR) *trans*-activating

factor in human cells, which method comprises:

- SUB C2
CONT
- (a) contacting cells capable of producing the Sp1 or B segment-binding β_3 -AR *trans*-activating factor with a test compound; and
 - (b) detecting a decrease in a level of activity of the Sp1 or B segment-binding β_3 -AR *trans*-activating factor.

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CONT

34. (Amended) A method of screening for a compound that inhibits activity of a β_3 -adrenergic receptor (β_3 -AR) *trans*-activating factor in human cells, which method comprises:

- (a) contacting cells capable of producing the β_3 -AR *trans*-activating factor with a test compound; and
- (b) detecting a decrease in a level of activity of the β_3 -AR *trans*-activating factor,

wherein the decrease in the level of activity of the β_3 -AR *trans*-activating factor is detected by detecting a decrease in the level of expression of a reporter gene operatively associated with an isolated nucleic acid having a nucleotide sequence GCCTCTGGGGAG (SEQ ID NO:1) relative to a level of expression prior to contact with the test compound.

B3 SUB C3

38. (New) A method of screening for a compound that increases activity of a β_3 -adrenergic receptor (β_3 -AR) *trans*-activating factor in human cells,

which method comprises:

(a) contacting cells capable of producing the β_3 -AR *trans*-activating factor with a test compound; and

(b) detecting an increase in a level of activity of the β_3 -AR *trans*-activating factor,

wherein the level of activity of the β_3 -AR *trans*-activating factor is detected by an increase in the level of expression of a reporter gene operatively associated with an isolated nucleic acid selected from the group consisting of:

(i) about a 7 kb genomic DNA 5' flanking region of a β_3 -AR transcription start site,

(ii) a deletion construct of a 7 kb genomic DNA located upstream of a β_3 -AR transcription start site;

(iii) a nucleic acid wherein the sequence that is greater than 80% identical to the nucleotide sequence GCCTCTGGGGAG (SEQ ID NO:1) is located 5' to the Sp-1 binding site relative to a transcription start site; and

(iv) a nucleic acid comprising a heterologous coding sequence operatively associated with a promoter and operatively associated with the nucleotide sequence that is greater than 80% identical to the nucleotide sequence GCCTCTGGGGAG (SEQ ID NO:1) in proximity to the Sp-1 binding site, whereby expression of the heterologous protein is regulated in a tissue specific manner.

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SUB C3
Cont

39. (New) A method of screening for a compound that decreases activity of a β_3 -adrenergic receptor (β_3 -AR) *trans*-activating factor in human cells, which method comprises:

- (a) contacting cells capable of producing the β_3 -AR *trans*-activating factor with a test compound; and
- (b) detecting an decrease in a level of activity of the β_3 -AR *trans*-activating factor, wherein the level of activity of the β_3 -AR *trans*-activating factor is detected by an decrease in the level of expression of a reporter gene operatively associated with an isolated nucleic acid selected from the group consisting of:

- (i) about a 7 kb genomic DNA 5' flanking region of a β_3 -AR transcription start site,
- (ii) a deletion construct of a 7 kb genomic DNA located upstream of a β_3 -AR transcription start site;
- (iii) a nucleic acid wherein the sequence that is greater than 80% identical to the nucleotide sequence GCCTCTGGGGAG (SEQ ID NO:1) is located 5' to the Sp-1 binding site relative to a transcription start site; and
- (iv) a nucleic acid comprising a heterologous coding sequence operatively associated with a promoter and operatively associated with the nucleotide sequence that is greater than 80% identical to the nucleotide